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Trends in the Hired Farm Work Force, 1945-87

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Trends in the Hired Farm Work Force, 1945-87. By Victor J. Oliveira,
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Abstract

New technology, nonfarm labor conditions, farm prices, and government policies have altered both the size and composition of the hired farm work force. Average annual farm employment dropped 70 percent between 1945 and 1987. Although family members continue to provide the major portion of agricultural labor, hired farmworkers contribute relatively more labor now, 36 percent in 1987 compared with 22 percent in 1945. The numbers of domestic workers and legally admitted foreign nationals doing hired farmwork have stabilized in recent years after wide variations responding to wartime labor shortages, changes in government work programs, and increased mechanization. The number of illegal aliens working in U.S. agriculture is unknown owing to lack of accurate data, but the increase in apprehensions of these aliens after 1965 suggests a large population. The Immigration Reform and Control Act of 1986 will probably significantly influence the composition of the hired farm work force.

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Summary

Annual average farm employment dropped from 9.8 million in 1945 to 2.9 million in 1987, a 70-percent decrease. Primary causes of this decline are mechanization and technological advances reducing farm labor input and raising agricultural productivity. The trend toward fewer but larger farms partly brought about by this growing efficiency has reduced the number of family workers and increased the hired labor requirements per farm. Family members continue to provide the major portion of agricultural labor, but hired farmworkers contribute more labor now, 36 percent in 1987 compared with 22 percent in 1945. New technology, nonfarm labor conditions, farm prices, and government policies have altered not just the size but also the composition of the hired farm work force.

The hired farm work force has comprised three groups: domestic workers, foreign nationals working in the United States under temporary worker programs, and undocumented workers. The number of domestic workers decreased from 4.3 million in 1950 to 2.5 million in 1987, primarily because of greater mechanization and other labor-saving technology. Large-scale mechanization has leveled off since 1970, stabilizing the number of domestic workers. However, the share of hired labor provided by migrant workers has dropped.

Foreign nationals have also worked in U.S. agriculture. Government-sanctioned programs have temporarily brought foreign nationals into the United States to do farmwork during agricultural labor shortages. The number of legally admitted foreign agricultural workers has dropped from a peak of 455,000 in 1959 to about 23,000 in 1987, primarily because of greater mechanization and stricter government regulation of foreign agricultural employment.

The number of undocumented foreign workers in U.S. agriculture is unknown. However, the number of illegal aliens apprehended while working in agriculture in this country grew from fewer than 8,000 in 1958 to almost 123,000 in 1975, suggesting a large population. Apprehensions dropped in 1987 in response to the Immigration Reform and Control Act of 1986, which temporarily redirected enforcement priorities from agriculture.

Trends in the Hired Farm Work Force, 1945-87

Victor J. Oliveira*

Introduction

New production methods, farm prices, government programs, and economic conditions in the nonfarm labor market have affected the number of hired farmworkers in the United States. This report examines the factors behind the historical trends in the size and composition of the hired farm work force from 1945 to 1987. The report also explores the implications of the Immigration Reform and Control Act of 1986 on the number and sources of hired farmworkers.

Agricultural Labor

Average annual employment in agriculture dropped from 9.8 million in 1945 to 2.9 million in 1987, a decrease of 70 percent (table 1). Family members (farm operators and unpaid workers) continued to provide the major portion of agricultural labor in 1987. But because the decline in the number of family workers was greater than the decline in the number of hired workers, hired workers' share of annual average farm employment increased from 22 percent in 1945 to 36 percent in 1987. However, hired workers' share has changed little since 1980.

The decrease in farm employment was related to increased productivity from mechanization and other technological innovations. Mechanization, higher yielding crops and livestock, and improved fertilizers, pesticides, and irrigation equipment have reduced the labor input per unit of output while expanding output of agricultural commodities (8, 16).¹ Even as farm employment declined, farm production increased over 90 percent between 1945 and 1986 (fig. 1).

However, agriculture's productive capacity increased faster than the demand for farm products. The result-

ing drop in farm commodity prices forced many smaller or less efficient farms out of business (4). The number of farms fell from almost 5.9 million in 1945 to about 2.2 million in 1987, but the average farm size grew from 195 acres to 461 acres during the same period (table 2). The trend toward fewer but larger farms reduced the number of family workers and increased the hired labor requirements per farm.

Hired Farmworkers

The hired farm work force has comprised three groups: domestic workers, foreign nationals working in the United States under temporary worker programs such as the H-2 Program and the Bracero Program, and undocumented foreign workers.

Domestic Workers

Beginning in 1945, the U.S. Department of Agriculture (USDA), in cooperation with the Bureau of the Census, U.S. Department of Commerce, annually conducted a series of Hired Farm Working Force Surveys until

Table 1—Annual average farm employment, 1945-87

Year	Annual average farm employment ¹			Hired labor as a percentage of total farm employment
	Total	Family	Hired	
	Thousands			Percent
1945	9,844	7,726	2,118	22
1950	9,926	7,597	2,329	23
1955	8,381	6,345	2,036	24
1960	7,057	5,172	1,885	27
1965	5,610	4,128	1,482	26
1970	4,523	3,348	1,175	26
1975	4,342	3,025	1,317	30
1980	3,705	2,402	1,303	35
1985	3,116	2,018	1,098	35
1987	2,897	1,846	1,051	36

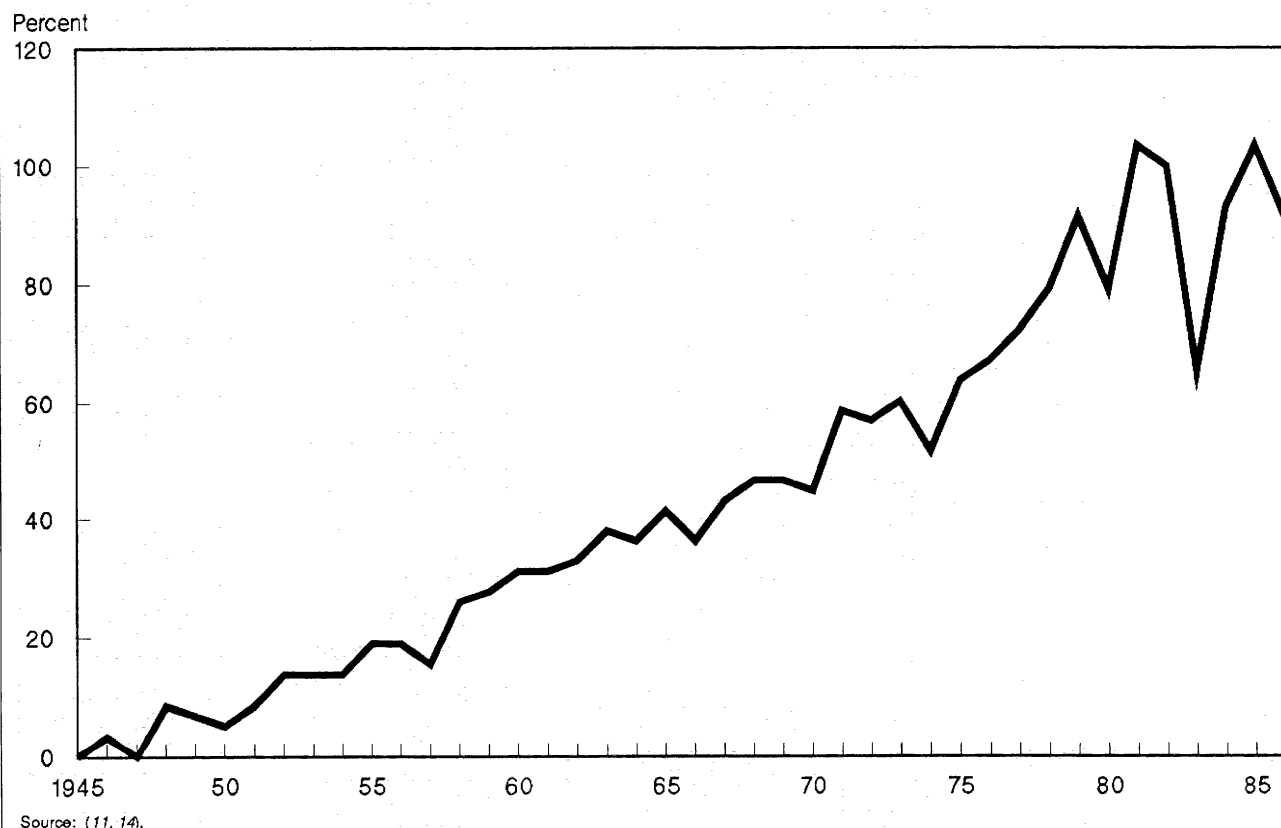
¹Average number of persons employed at any one time. Figures for 1945-80 are based on four quarters of data; figures for 1985-87 are based on three quarters of data.

Source: (10).

*The author is an economist with the Agriculture and Rural Economy Division, Economic Research Service, U.S. Department of Agriculture.

¹Italicized numbers in parentheses refer to items cited in the References section.

Figure 1
Percentage change in farm output, 1945-86



1977. The surveys were conducted biennially thereafter (no surveys were conducted in 1953 or 1955). In 1985, USDA expanded the Hired Farm Working Force Survey to include farm operators and unpaid farmworkers as well as hired farmworkers and renamed it the Agricultural Work Force Survey (7, 17).

Foreign and domestic workers do hired farmwork in the United States. Some foreign workers entered the

Table 2—Number and size of farms, 1945-87

Year	Number of farms	Average size of farms
	<i>Thousands</i>	<i>Acres</i>
1945	5,859	195
1950	5,382	215
1955	4,782	242
1960	3,963	297
1965	3,356	340
1970	2,954	373
1975	2,521	420
1980	2,433	427
1985	2,275	446
1987	2,173	461

Source: (10).

United States legally under temporary foreign worker programs, but a larger number worked here illegally during much of the 1945-87 period. The Hired Farm Working Force Surveys probably enumerated few foreign workers because the workers either had returned home before the surveys were conducted in December or may have avoided survey enumerators due to their illegal status.² Therefore, the data probably do not reflect the actual number of foreign workers in U.S. agriculture. However, the surveys provide good coverage of domestic farmworkers, and these data were used to examine the historical trends in the number of hired farmworkers.

In 1945, the last year of World War II, 3.2 million hired farmworkers worked a total of 301 million days at hired farmwork (table 3). As the United States shifted from wartime to the first full year of peace in 1946, the employment patterns of hired farmworkers changed. The number of hired workers declined to fewer than

²Agricultural work is highly seasonal. In most States, labor use peaks during the summer while significantly fewer hired workers are employed in winter. Most illegal aliens who worked in agriculture probably had seasonal jobs.

2.8 million in 1946. Many of the youth, older men, and women who did mostly short-term hired farmwork because of the wartime situation were replaced by adult males, many of them returning veterans, who worked for longer periods during the year (17). Thus, although the number of hired workers decreased, the average number of days worked increased, resulting in an increase in total days worked by hired farmworkers.

After 1946, the number of workers grew yearly, peaking at 4.3 million in 1950. High U.S. unemployment during this time increased the number of workers willing to work on farms (17). Total days worked by hired farmworkers also increased.

In the early 1950's, the number of hired workers and total days worked fell rapidly. Expanding employment opportunities in higher wage nonagricultural industries, including a movement of workers to defense plants during the Korean War, brought about the shift of workers out of the farm labor force (17). While much hired farmwork consisted of low wages and short-term

seasonal employment, defense industries provided regular, full-time work. Inductions and enlistments in the Armed Forces also depleted the number of domestic hired workers. During this period, farmers substituted foreign workers, both legal and illegal, for domestic workers.

After the war ended in 1953, the number of hired workers increased once again and reached 4.2 million in 1958. This growth partly reflected the economic recession in 1958 that cut back employment in non-agricultural industries and increased the number of people willing to do farmwork (17). Although the number of hired farmworkers increased, total days worked did not. Advances in harvesting and processing methods shortened the harvest period, which lowered the risks from adverse weather for growers of perishable crops. Farmers responded by using more workers for shorter periods of time.

From 1958 to 1970, the number of hired workers declined in 9 out of the 12 years, falling from 4.2 to

Table 3—Number of domestic hired farmworkers and total days worked, 1945-87¹

Year	Hired farmworkers	Total days worked	Year	Hired farmworkers	Total days worked
	<i>Thousands</i>	<i>Millions</i>		<i>Thousands</i>	<i>Millions</i>
1945	3,212	301	1965	3,128	266
1946	2,770	308	1966	2,763	235
1947	3,394	361	1967	3,078	261
1948	3,752	381	1968	2,919	232
1949	4,140	369	1969	2,571	202
1950	4,342	NA	1970	2,488	201
1951	3,274	321	1971	2,550	195
1952	2,980	272	1972	2,809	247
1953 ²	NA	NA	1973	2,671	254
1954	3,009	293	1974	2,737	240
1955 ²	NA	NA	1975	2,638	225
1956	3,575	294	1976	2,767	237
1957	3,962	287	1977	2,730	254
1958	4,212	NA	1978 ²	NA	NA
1959	3,577	311	1979	2,652	269
1960	3,693	318	1980 ²	NA	NA
1961	3,488	269	1981	2,492	243
1962	3,622	293	1982 ²	NA	NA
1963	3,597	272	1983	2,595	260
1964	3,370	272	1984 ²	NA	NA
			1985	2,522	269
			1986 ²	NA	NA
			1987 ³	2,463	276

NA = Not available.

¹Data are rounded to nearest thousand.

²No survey conducted.

³Preliminary estimates obtained from the 1987 Agricultural Work Force Survey.

Source: (7, 17).

2.5 million. Days worked by hired farmworkers similarly declined. Although higher incomes from off-farm employment also contributed, increased mechanization and other labor-reducing technological innovations caused most of this dramatic decrease in both the number of hired farmworkers and days worked. The planting and harvesting of many crops (such as cotton and grains) were widely mechanized during the 1950's and 1960's (8).

Since 1970, the number of domestic hired farmworkers employed each year has remained relatively stable at about 2.5-2.7 million. The only time during the last 18 years when the number of hired farmworkers exceeded 2.8 million was 1972, when increases in farm exports and farm prices increased the demand for hired labor (17). The stabilization in the number of hired farmworkers in the 1970's and 1980's after a long downward trend largely reflected the leveling off of advances in mechanization.

Although the number of workers stabilized, the number of total days worked by hired farmworkers has tended to climb upward since the early 1970's. This result may be due to the trend toward fewer but larger farms which contributed to the substitution of hired labor for family labor by reducing the number of family workers while increasing the hired labor requirements per farm. Some hired farmworkers responded by working more days.

Domestic Migrant Workers

Migrant farmworkers make up a small but important subgroup of the domestic hired farm work force. Migrants are defined here as persons who temporarily leave their home county and stay away from home overnight in order to do hired farmwork. Demand for migrant labor is subject to even greater year-to-year fluctuations than total hired labor. Migrants supplement local labor during peak use seasons when the demand for farmworkers frequently exceeds the supply of farmworkers living in the local area. Since many migrants work for only short time periods, their work is greatly affected by weather conditions (especially during harvesting), variations in crop yield, and the availability of local labor to do farmwork (17). Labor for harvesting highly perishable fruits and vegetables must be available at exact times to prevent quality deterioration and, therefore, value reduction of the harvested commodity (3). Vegetable, fruit and nut, and horticultural specialty farms that hire large numbers of seasonal workers for short periods during planting and harvesting seasons are the most likely to employ migrant workers.

There were 420,000 domestic migrant workers in 1949 (table 4). The number fell to 352,000 in 1952, coinciding with the overall decrease in the number of domestic hired farmworkers, and then peaked at 477,000 in 1959. New production techniques, particularly new food processing methods, tended to shorten the overall harvest time and increase demand for farmworkers for shorter periods (17). In some areas, this increase in labor needed for these short time periods could not be met by local workers, thereby increasing the need for migrants.

From 1959 to 1985, the number of migrants fell 67 percent, from 477,000 to 159,000. A temporary exception to the downward trend was in 1965, when the number of migrants increased 80,000 from the previous year. This rise probably represented a temporary adjustment to the termination of the Bracero Program, which enabled Mexican nationals to legally enter the United States to do temporary farmwork. When the Bracero Program ended in 1964, farmers responded by replacing legal foreign workers with domestic migrant workers and illegal aliens. Since 1979, substantial annual fluctuations in the number of migrants have been observed. Because estimates of migrant farmworkers are based on a relatively small number of interviews, some of the more recent fluctuations may result more from estimating or nonsampling errors associated with survey procedures than from actual changes in numbers of migrant workers.

Not only has the number of migrants declined, but the migrant share of the domestic hired labor work force has shrunk (table 4). Between 1949 and 1969, migrants accounted for an average of 11.2 percent of the hired farmworkers, falling to an average of only 7.2 percent since 1970. The share of total hired labor supplied by migrants, measured by days worked, has similarly declined.

The decrease in the number of domestic migrant farmworkers reflects the general trend toward increased mechanization. However, the degree of mechanization has varied across commodity groups. The technology for machine harvesting without damaging the quality and value of the crop does not exist for some crops, such as many tree fruits for the fresh market and some other fruits and vegetables, such as strawberries, broccoli, and asparagus (16). Harvesting by hand preserves the quality and cosmetic appearance of many fruits and vegetables in a way that mechanical harvesting does not. Migrant labor is crucial to many farms specializing in hand-harvested commodities.

Table 4—Number of domestic migrant farmworkers, 1949-85¹

Migrant farmworkers			Migrant farmworkers		
Year	Number	Percentage of total domestic hired farm work force	Year	Number	Percentage of total domestic hired farm work force
	<i>Thousands</i>	<i>Percent</i>		<i>Thousands</i>	<i>Percent</i>
1945 ²	NA	NA	1965	466	14.9
1946 ²	NA	NA	1966	351	12.7
1947 ²	NA	NA	1967	276	9.0
1948 ²	NA	NA	1968	279	9.6
1949	420	10.1	1969	257	10.0
1950	403	9.3	1970	196	7.9
1951 ²	NA	NA	1971	172	6.7
1952	352	11.8	1972	184	6.6
1953 ³	NA	NA	1973	203	7.6
1954	365	12.1	1974	209	7.6
1955 ³	NA	NA	1975	188	7.1
1956	427	11.9	1976	213	7.7
1957	427	10.8	1977	191	7.0
1958 ²	NA	NA	1978 ³	NA	NA
1959	477	13.3	1979	217	8.2
1960	409	11.1	1980 ³	NA	NA
1961	395	11.3	1981	115	4.6
1962	380	10.5	1982 ³	NA	NA
1963	386	10.7	1983	226	8.7
1964	386	11.5	1984 ³	NA	NA
			1985	159	6.3
			1986 ³	NA	NA
			1987 ²	NA	NA

NA = Not available.

¹Data are rounded to nearest thousand.

²Data on migrant farmworkers were not available in 1945-48, 1951, 1958, and 1987.

³No survey conducted.

Source: (17).

Despite the importance of migrant labor in these less mechanized commodities and the fact that these commodities account for an increasing share of farm labor requirements, domestic migrants have accounted for a smaller share of the total hired farm work force and total days worked. This discrepancy is difficult to explain. Data on farm production and hours of labor required for various crops do not suggest that the demand for migrant labor has diminished relative to all hired labor (11). In fact, migrants would logically have constituted an increasing, instead of declining, share of the total hired labor.

One explanation for this discrepancy is that foreign workers have accounted for an increasing share of migrant workers. Because the survey data probably do not completely account for foreign workers, an increased substitution of foreign workers for domestic migrant workers would appear as a decrease in both

the number of migrants and their share of total hired labor. However, this hypothesis cannot be statistically tested because reliable sources of data on the number of illegal workers in agriculture do not exist.

Legally Admitted Foreign Nationals

Legally admitted foreign temporary agricultural workers are intended as an emergency labor source to be used after all reasonable attempts to obtain U.S. workers have failed (6). The first U.S. temporary foreign farmworker program, under the Immigration Act of 1917 (which placed the first strict controls on immigration into the United States), responded to a tight domestic labor market during World War I (21). This program used an exemption in the act to temporarily admit foreign agricultural workers to the United States. Although the World War I program officially ended in 1921, it continued on an informal basis during the

1920's. However, U.S. agriculture no longer needed supplemental labor during the depression years of the 1930's, and the United States deported many Mexican nationals.

The Bracero Program

The largest number of legally admitted foreign workers entered the United States under the Bracero Program (21). The Bracero Program, as defined in this report, lasted from 1942 to 1964 in three separate programs or phases. Each phase was categorized by different U.S. laws or international agreements. The first phase, the World War II period, which lasted from 1942 to 1947, began when a tight farm labor market during World War II led to a U.S. agreement with Mexico to import workers to work in U.S. agriculture. The agreement (under the authority of the Immigration Act of 1917) reflected conditions prescribed by the Mexican Government under which Mexican nationals could work in the United States. The Mexican Government was still sensitive to the large-scale deportation of Mexicans during the 1930's, which affected the terms of the agreement. In 1943, this agreement was replaced by special legislation (called the emergency labor supply program) that, together with the international agreements, served as the basis for the Bracero Program during the World War II period. The U.S. Government paid for recruiting and transporting Mexican farmworkers to U.S. farms during this first phase. Changes in the legislation permitted the continued importation of Mexican workers for 2 years after the war ended.

The second phase of the Bracero Program, the post-war period, lasted from 1948 to 1950 (21). After the special wartime legislation ended in 1947, the Bracero Program was regulated by international agreement. During this phase, the Immigration Act of 1917 was once again the authority used to admit temporary Mexican workers to the United States. Unlike in the first phase, U.S. agricultural employers, not the U.S. Government, were the contractors and paid the transportation and recruitment expenses of the Mexican workers. Between 1945 and 1950, an average of about 65,000 foreign agricultural workers annually entered this country, about 85 percent of whom were Mexicans admitted under the Bracero Program (table 5) (19). Most of these laborers worked in the Southwest, primarily in cotton, sugar beets, fruits, and vegetables (21).

In 1951, new legislation, Public Law 78, greatly expanded the Bracero Program when a tight labor market during the Korean War increased the flow of illegal

workers from Mexico into the United States (21, 5). Concern about the need for supplemental farm labor and possible exploitation of Mexican workers by U.S. employers resulted in an agreement between the United States and Mexico allowing the entry of Mexican workers for temporary employment in U.S. agriculture under two conditions. U.S. employers could hire Mexicans only if no domestic workers were available to fill the jobs, and employment of the Mexicans would not adversely affect the wages and working conditions of U.S. workers. U.S. farm employers had to make reasonable efforts to recruit domestic workers at the same wages and working conditions offered to the Mexicans. In addition, the law required employers to pay foreign workers prevailing wages for domestic workers in the area of employment and guarantee work for a specified portion of the workers' contract period. Under the law, the U.S. Government recruited workers and paid for their transportation from Mexico to U.S. reception centers. U.S. employers then paid for the

Table 5—Temporary foreign workers working in U.S. agriculture, 1945-87¹

Year	Foreign workers	Year	Foreign workers
	<i>Number</i>		<i>Number</i>
1945	72,900	1965	35,871
1946	51,347	1966	23,524
1947	30,775	1967	23,603
1948	44,916	1968	13,323
1949	112,765	1969	15,830
1950	76,525	1970	17,474
1951	203,640	1971	13,684
1952	210,210	1972	12,526
1953	215,321	1973	NA
1954	320,737	1974	NA
1955	411,966	1975	13,824
1956	459,850	1976	13,179
1957	452,205	1977	15,112
1958	447,513	1978	14,533
1959	455,420	1979	17,328
1960	334,729	1980	17,570
1961	310,375	1981	17,333
1962	217,010	1982	19,258
1963	209,218	1983	18,850
1964	200,022	1984	18,805
		1985	19,679
		1986	20,102
		1987	22,588

NA = Not available.

¹Data for 1975-87 refer to the number of jobs certified for temporary foreign workers (H-2 and H-2A's) in agriculture. The number of jobs certified may overestimate the actual number of foreign workers admitted for employment. An employer may use only part, or none, of the certifications granted. Also, some admitted foreign workers may work in two or more certified jobs.

Source: (19, 20).

workers' transportation to and from the reception centers and the places of employment.

During this third phase of the Bracero Program, the number of foreign workers admitted for temporary employment in U.S. agriculture grew from about 204,000 in 1951 to 460,000 in 1956 (table 5). Most of this increase resulted from an attempt to control illegal immigration to the United States by offering a substitute legal means for aliens to enter this country (21). The number of legally admitted foreign workers fell from its peak of 460,000 in 1956 to 200,000 in 1964, when the program ended. This decrease reflected reduced demand for farm labor due to farm mechanization (especially of the cotton harvest in which many Bracero workers were employed), tighter procedures for certifying the need for Bracero workers, and greater enforcement of workers' wage guarantees.

Other Temporary Agricultural Worker Programs

About 93 percent of temporary foreign farmworkers who worked in U.S. agriculture from 1942 to 1964 were Mexicans admitted under the Bracero Program (19). However, workers from other countries (primarily the British West Indies, the Bahamas, and Canada) entered the United States under other programs. Like the Bracero Program, these programs were enacted in response to the labor shortage during World War II and were governed first by international agreements (in accordance with the 1917 Immigration Act) and then by legislation known as the emergency labor supply program, which included the Bracero Program (9). Unlike the Bracero workers who were employed primarily in the Southwest and Pacific Coast States, workers under these other programs were primarily employed along the east coast of the United States.

When the emergency labor supply program ended in 1947, the Immigration Act of 1917 was again the authority used to admit non-Bracero workers into the United States until 1952, when the Immigration and Nationality Act was enacted (9). This act created the H-2 Temporary Foreign Worker Program.³ When the Bracero Program ended in 1964, the Immigration and Nationality Act became the major legislative vehicle for admitting foreign farmworkers.

Unlike the statutory authorities for the Bracero Program, the H-2 Program was a permanent part of the law, not intended to meet a specific national labor

shortage (9). The H-2 Program permitted the entry of foreign workers into the United States to do temporary farmwork when there were not enough available qualified domestic workers to do the work and the foreign workers would not adversely affect the wages or working conditions of similarly employed U.S. farmworkers.

Agricultural employers of H-2 workers were required to provide them with free round-trip transportation and housing. In addition, the U.S. Government set minimum wage rates for both H-2 and U.S. workers doing similar work on farms employing H-2 workers. The purpose of the wage minimums was to set the wages of similarly employed U.S. workers at levels high enough that the presence of the foreign workers would not adversely affect their wages (21). Employers of H-2 workers were required to pay both their foreign and U.S. workers the higher of: 1) the adverse effect wage rate (AEWR) established by the U.S. Department of Labor, 2) the Federal or State minimum wage, or 3) the prevailing wage rate in the area of employment.⁴ U.S. workers employed on farms hiring foreign H-2 workers received the same benefits as the foreign workers, such as free transportation and housing and the minimum wage.

Because the H-2 Program's strict requirements tightly regulated the employment of temporary foreign agricultural workers, the number of such workers admitted into the United States under the program was significantly less than that admitted under the Bracero and other programs (13). About 18,000 foreign workers were admitted annually to the United States from 1965 to 1987 compared with almost 242,000 from 1945 to 1964 (table 5).

Both the size and the composition of the temporary foreign farm work force changed. Workers from the British West Indies supplanted Mexicans as the primary source of legally admitted temporary foreign farm labor. These workers were primarily employed on the east coast because agricultural employers in the Western United States had a readily available supply of illegal workers and therefore were less inclined to go through the legal procedures for participating in the H-2 Program (9). Due to their small numbers, H-2 workers had little effect on the national farm labor market. However, they provided an important share of the labor used in harvesting apples in the East and sugarcane in Florida (8).

³The H-2 Program derives its name from its location in the Immigration and Nationality Act of 1952: Section 101(a)(15)(H)(ii).

⁴However, employers of H-2 workers were exempt from paying some employment taxes on foreign workers (21).

The H-2A Program, created by the Immigration Reform and Control Act of 1986, replaced the H-2 Program on June 1, 1987. Believing that the existing H-2 Program did not meet the needs of some agricultural employers, Congress revised the old H-2 Program to require shorter time requirements in the certification process (1).⁵ In 1987, 22,588 jobs were certified for temporary foreign workers to work in U.S. agriculture, an increase of over 2,400 jobs from the previous year (table 5).

Undocumented Foreign Workers

Undocumented foreign workers left their native countries to work in the United States because of more jobs and higher wages. More illegal workers probably worked in agriculture than in any other employment sector in this country. Lack of education, work experience, and language fluency did not hinder foreign workers as much in agriculture as in many other types of jobs.

Many of the undocumented workers, or illegal aliens, worked in seasonal agricultural jobs, especially the harvest of fruits and vegetables, and returned home each year after completing their work in the United States (2). Their labor was crucial to many fruit and vegetable farms producing commodities that required hand harvesting or labor-intensive cultivation (13). The short duration of employment, relatively low wages, strenuous nature of the work, and lack of job security associated with seasonal farmwork made these jobs unattractive to many domestic workers. As a result, many U.S. farm employers came to rely on undocumented workers as a ready source of labor (2). Because good estimates of their number do not exist, these undocumented workers constituted an unknown portion of the hired farm labor force in this country. Some observers estimate that undocumented workers accounted for 10-15 percent of all hired farmworkers in the first half of the 1980's (16).

Because of the lack of accurate data, directly measuring the number of undocumented workers in U.S. agriculture during 1947-87 was not possible. However, the Immigration and Naturalization Service (INS) collected information on the number of illegal aliens apprehended in U.S. agriculture. Although the number of apprehensions are not suitable for estimating the number of illegals who have worked in this country,

they may indirectly indicate the flow of illegals over time. Apprehensions reflect both law enforcement efforts as well as the number of illegals in this country; therefore, apprehended illegal aliens probably represent only a fraction of foreign workers illegally working in this country.

Fewer than 8,000 illegal workers were apprehended in agriculture in 1958, the first full year in which data on apprehensions were available (fig. 2). This number increased slightly until 1964, the year the Bracero Program ended. Then, the number of apprehensions jumped, reaching a peak of almost 123,000 in 1975.

Apprehensions remained above 100,000 until 1980, when there were only 58,000 apprehensions. However, the low number in 1980 resulted from INS cutting back its raids on workplaces so as not to discourage illegal aliens from cooperating with census-takers during the 1980 Population Census (15). The number of apprehensions from 1980 to 1986, although still far greater than the levels in the 1950's and 1960's, never reached the levels of 1973-79. This decline in apprehensions did not necessarily reflect a decrease in the number of illegal aliens working in agriculture. Instead, policy changes within INS shifted enforcement priorities away from the highly visible sweeps of workplaces toward greater emphasis on arrests of criminal law violators, such as counterfeiters and smugglers (18). INS also redirected its enforcement efforts to "quality" arrests of aliens who were probably displacing U.S. workers in high-paying occupations rather than in farmwork (15).

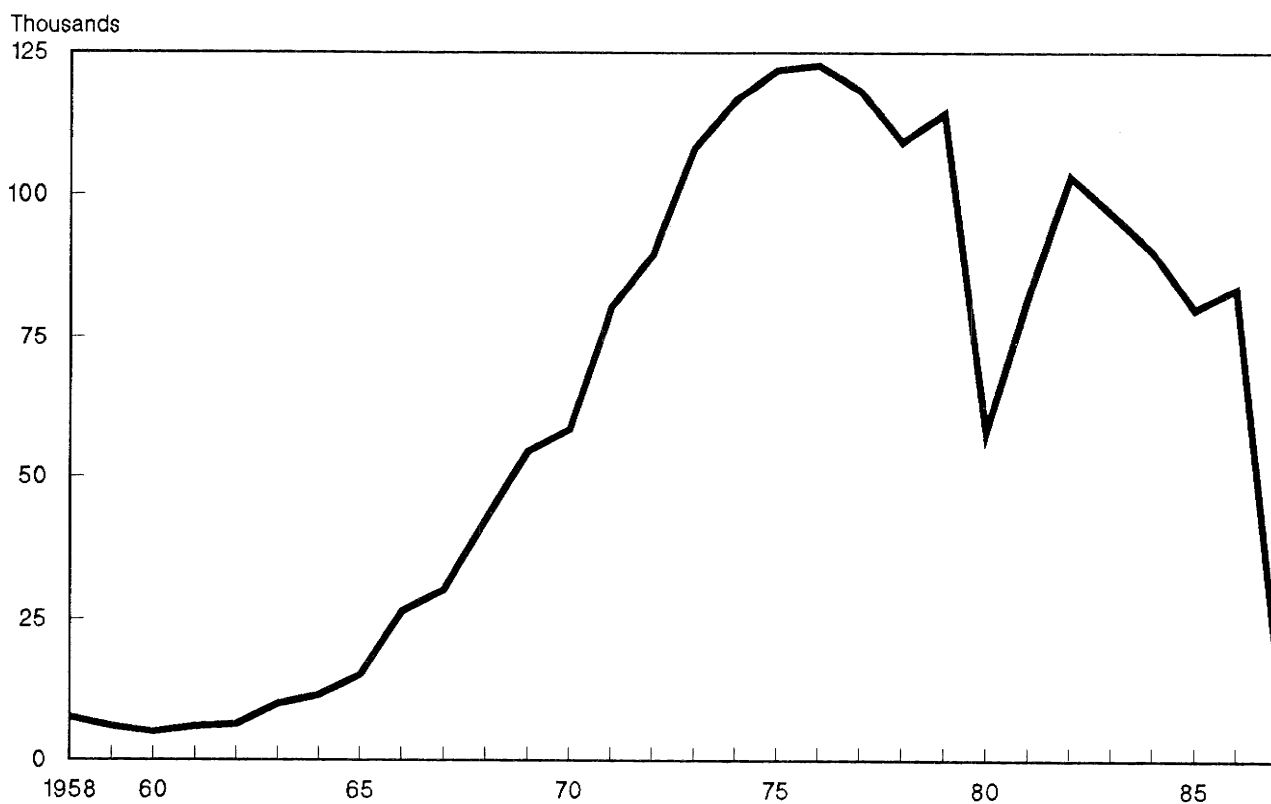
The number of apprehensions dropped by 80 percent between 1986 and 1987. This dramatic decrease was related to the enactment of the Immigration Reform and Control Act of 1986.

The 1986 Act attempts to reduce the flow of illegal aliens into this country by imposing strict hiring requirements on U.S. employers. Employers who knowingly hire illegal aliens face fines of \$250-\$10,000 for each unauthorized alien employed and possible imprisonment of up to 6 months (12). However, the law does provide a mechanism for illegal aliens who have been living in the United States continuously since January 1, 1982, to become legal residents and U.S. citizens.

The law is also designed to help agricultural employers who have relied on illegal aliens in the past to adjust to a legal workforce (12). In addition to revising the H-2 Program into the H-2A Program, the law created the Special Agricultural Worker (SAW) Program. The SAW provision of the law exempted agricultural

⁵For example, the deadline for agricultural employers to file applications for foreign workers was reduced from 80 to 60 days before the date the employer needed the worker and the appeals process for employers whose request for foreign workers was denied became faster (12).

Figure 2

Illegal aliens apprehended in U.S. agriculture, 1958-87

Source: (18).

employers involved in seasonal agricultural services from any penalties for hiring illegal aliens until December 1, 1988.⁶ This date coincided with the deadline for aliens to apply for resident status under the SAW Program. The program also enables illegal aliens who worked in seasonal agricultural services for at least 90 days in the year ending May 1, 1986, to apply for legal resident status. The law provides a special replenishment program that will allow additional replenishment of special agricultural workers (RAW's) from other countries to enter this country to do farmwork in the event of a shortage of agricultural workers in seasonal agricultural services in fiscal years 1990-93.

Several changes caused by the new immigration act that reduced the number of illegal aliens apprehended in U.S. agriculture between 1986 and 1987 included the following:

- INS redirected its resources from enforcement to educating the public on the consequences of the act,
- INS did not search those farms involved in seasonal agricultural services exempted from penalties for hiring illegals until December 1, 1988, and
- INS did not apprehend aliens who applied or were going to apply for legalization under the SAW provision (18).

The number of persons legalized under the SAW provision partly reflects the extent to which illegal aliens were employed in U.S. agriculture in recent years. About 1.3 million aliens applied for legal resident status under the Special Agricultural Worker Program.

Implications

Since 1970, the number of domestic workers and legally admitted foreign nationals doing hired farmwork in this country has remained relatively stable after

⁶USDA defines seasonal agricultural services to be field work related to planting, cultivating, growing, and harvesting of fruits, vegetables, and other selected crops. All work with livestock is excluded (1).

dramatically declining during the 1950's and 1960's. However, factors that affected hired labor trends in the past may also affect trends in the future. These factors include technological developments, economic conditions, and farm prices. Government programs, including farm programs and the Immigration Reform and Control Act of 1986, may significantly affect both the size and composition of the hired farm work force.

The effect of the new immigration law on the hired farm work force will depend on a number of factors, including the strictness of law enforcement, the degree of compliance among agricultural employers, the number of aliens admitted to the United States under the SAW Program including its replenishment phase, and the degree to which these SAW's and RAW's, once legalized, continue to work in agriculture. If the law is strictly enforced and the number of legalized aliens working in agriculture is not sufficient to replace the illegal aliens who worked in agriculture, some farm employers may decide to hire more domestic workers, participate in the H-2A Program, shift to less labor-intensive commodities, or increase mechanization. The effects of immigration reform on hired farmworkers and U.S. agriculture will require close monitoring.

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